

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking Regarding Policies,
Procedures and Rules for the California Solar
Initiative, the Self-Generation Incentive Program
and Other Distributed Generation Issues.

Rulemaking 06-03-004
(Filed March 2, 2006)

**ADMINISTRATIVE LAW JUDGE'S RULING APPROVING PLAN FOR 2006
AND 2007 MEASUREMENT AND EVALUATION REPORTS ON THE SELF
GENERATION INCENTIVE PROGRAM**

On March 8, 2006, Pacific Gas and Electric Company (PG&E) filed a motion on behalf of the program administrators of the Self Generation Incentive Program (SGIP), namely PG&E, Southern California Edison Company, San Diego Gas and Electric Company (SDG&E), and the San Diego Regional Energy Office (SDREO), requesting approval of their proposal for 2006 and 2007 Measurement and Evaluation Reports for the SGIP. This ruling approves the plan with minor modifications. The plan is attached as Appendix A of this ruling.

Background

The program administrators (PAs) submitted the measurement and evaluation report plan in accordance with Ordering Paragraph 13 of Decision (D.) 01-03-073. Generally, the reports recommended in the plan are consistent with reports prepared in earlier years. These include Renewable Fuel Use and Impact Reports, a Program Administrator Comparative Assessment Report, and an Update of the Cost Effectiveness Analysis. In addition, the PAs propose three new studies – a retention study, a market characterization study, and a process

evaluation. According to the plan, an independent evaluator selected through a competitive bidding process would prepare all the reports.

Discussion

The measurement and evaluation plan submitted by the PAs is reasonable and should be approved, with four minor modifications. First, the plan should incorporate an evaluation of the impacts, if any, of SGIP installations on transmission and distribution (T&D) system performance, reliability, and operations into the Impact Reports. This modification is proposed in order to allow the Commission to assess the impacts of distributed generation investments on utility grid and transmission planning.

Second, the “Update of the Cost-Effectiveness Analysis” study, which is staged to follow a Commission decision on the cost-benefit methodology, should include an explicit provision for the evaluator to develop methodological options for characterizing and quantifying program market effects or market transformation effects for all technologies involved in the program in 2006. This will help form the basis for a next generation of cost-benefit analyses on self-generation technologies.

Third, the “Market Focused Process Evaluation Report” should include evaluation of the impact on consumers of the transition from the self-generation incentive program to the California Solar Initiative program for solar technologies. Covering this issue during the transitional timeframe of 2006 and 2007 for the self-generation incentive program will help inform approaches to potential future programmatic changes.

Fourth, the “Program Administrator Comparative Assessment Report” should specifically address the differences in marketing, outreach and administrative processes used by the various administrators.

Accordingly, **IT IS RULED** that the 2006 and 2007 Measurement and Evaluation Report Plan for the Self Generation Incentive Program, as filed on March 8, 2006 by PG&E on behalf of the program administrators, is approved as modified with regard to analysis of transmission and distribution impacts, market effects on cost-benefit analysis, the transition from the self-generation incentive program to the California Solar Initiative, and the marketing, outreach, and administrative processes of the administrators, as described in this ruling.

Dated May 18, 2006, at San Francisco, California.

Dorothy J. Duda
Administrative Law Judge

APPENDIX A

**BEFORE THE PUBLIC UTILITIES COMMISSION
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**JOINT MOTION OF THE SELF GENERATION
INCENTIVE PROGRAM ADMINISTRATORS TO
APPROVE PLAN FOR 2006 AND 2007 MEASUREMENT
AND EVALUATION REPORTS**

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March 8, 2006

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

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Rulemaking 06-03-004

**JOINT MOTION OF THE SELF GENERATION INCENTIVE PROGRAM
ADMINISTRATORS TO APPROVE PLAN FOR 2006 AND 2007 MEASUREMENT
AND EVALUATION REPORTS**

I. EXECUTIVE SUMMARY

In accordance with Rule 45 of the Commission's Rules of Practice and Procedure, Southern California Edison Company, Southern California Gas Company, Pacific Gas and Electric Company, San Diego Gas & Electric Company, and the San Diego Regional Energy Office respectfully submit this motion seeking approval of their proposal for 2006 and 2007 Measurement and Evaluation Reports for the Self-Generation Incentive Program (SGIP). This proposal outlines the reports to be prepared, the schedule for preparation, and the process for selecting an independent third-party evaluator for program year (PY) 2006 and 2007. The joint parties to this motion are the Program Administrators (PAs) of the Self-Generation Incentive Program (SGIP) Working Group (WG) formed by the Commission in D.01-03-073 (Ordering Paragraph 16). The SGIP PAs have authorized Pacific Gas and Electric Company to make this filing on their behalf.

Ordering Paragraph (O.P.) 13 of Decision (D.) 01-03-073 states that "[t]he assigned Administrative Law Judge, in consultation with Energy Division and the program administrators, shall establish a schedule for filing the required evaluation reports." The ALJ ruling of April 24, 2002 developed that schedule, which ended with the Fourth Year Impact Report to be filed after the expected end of program funding on December 31, 2004. AB 1685 (and subsequent CPUC Decision 04-12-045) extended the SGIP through December 31, 2007. Although the Decision included no directive on further program evaluation and reporting, the CPUC expressed an intent to address the issue at a later time: "In D.01-03-073, we directed the program administrators to evaluate program success and conduct load impact studies to verify energy production and

system peak demand reduction....We intend to address subsequent evaluation plans in a future decision." (page 14)

To address this issue, the CPUC's Energy Division has requested that the PAs propose a schedule of measurement and evaluation (M&E) reports to the CPUC for PY 2006 and 2007. This proposal by the PAs outlines the studies to be conducted, the schedule for delivery of study reports, and the process for selecting an independent third-party evaluator.

The recommended reports are consistent with the reports prepared in earlier years. The Renewable Fuel Use Reports and Impact Reports continue a delivery schedule previously established by the CPUC for earlier program years. The Program Administrator Comparative Assessment and the Update of the Cost-Effectiveness Analysis are updates to previous reports. Three new studies are proposed: (1) a retention study to assess the long-term persistence of impacts from self-generation technologies installed through the program; (2) a market characterization study to identify customers and markets that have high potential for successful installations of self-generation technologies; and (3) a process evaluation focused on improving the way the program processes mesh with market processes. All reports will be prepared by the SGIP independent evaluator, as directed by the CPUC in D.01-03-073.

On the behalf of and in conjunction with the PAs, Pacific Gas and Electric Company (PG&E) is currently in a competitive bidding process to select an independent third-party evaluator. The PAs last conducted this process in 2001. PG&E and the PAs have completed a request for information process to develop a list of qualified vendors to bid on the work. A request for proposals will be issued upon ALJ approval of this motion, and the remaining vendor selection and contracting process will take approximately four months to complete.

The PAs believe that it is important to continue M&E activities uninterrupted through PY 2007. Past M&E results were initially hampered by the low numbers of installed projects in the early years of the program. The number of installations in each of the PA territories continues to increase and is projected to be higher in 2006 and 2007 than prior years; this provides an opportunity to conduct analyses on a broader population of projects and technologies. Continued and seamless M&E efforts in 2006 and 2007 will provide more robust results than have previously been possible. M&E efforts will continue through 2008 in order to conduct studies that capture projects installed through PY 2007.

Although an estimate of the cost of the 2006-2007 SGIP M&E cannot be made until the completion of the competitive solicitation, the PAs intend to stay well within the current SGIP EM&V budget.

II. DETAILS OF PROPOSED REPORTS

A. Proposed Schedule of 2006-2007 M&E Studies

Report	Due Date
Renewable Fuel Use Report #7	March 19, 2006
Renewable Fuel Use Report #8	September 19, 2006
PY 2005 Impacts Report	December 15, 2006
Program Administrator Comparative Assessment	January 19, 2007
Update of the Cost-Effectiveness Analysis	Within six months of CPUC adoption of a cost-benefit methodology, but no sooner than March 16, 2007
Renewable Fuel Use Report #9	March 19, 2007
PY 2006 Impacts Report	June 15, 2007
Renewable Fuel Use Report #10	September 19, 2007
Renewable Fuel Use Report #11	March 19, 2008
PY 2007 Impacts Report	June 16, 2008
Newly Proposed Studies	
Market Focused Process Evaluation Report	May 30, 2007
Market Characterization Study Report	June 29, 2007
Retention Study Report	August 10, 2007

B. Description of Proposed 2006-2007 M&E Studies

The following paragraphs provide a brief description of each of the studies proposed.

1. IMPACT REPORTS

The PAs propose to continue the previously adopted schedule for Impact Reports into 2008 for results of installations through PY 2007. The PAs request that the due date for the 2005 Impact Report be extended to December 15, 2006 because the successful bidder for the next evaluation contract will not be selected until sometime this summer.

D.01-03-073 states that "[t]he assigned Administrative Law Judge, in consultation with Energy Division and the program administrators, shall establish a schedule for filing the required evaluation reports." (O.P. 13) The ALJ ruling of April 24, 2002 developed that schedule, which ended with the Fourth Year Impact Report that was filed after the expected end of program funding on December 31, 2004. AB 1685 (and subsequent CPUC Decision 04-12-045) extended

the SGIP through December 31, 2007. Although D.04-12-045 included no directive on further impact reporting, the CPUC expressed an intent to address the issue at a later time: "In D.01-03-073, we directed the program administrators to evaluate program success and conduct load impact studies to verify energy production and system peak demand reduction....We intend to address subsequent evaluation plans in a future decision." (page 14)

This study would also collect data and report on thermal energy use. D.01-03-073 states that Level 2 fuel cell and Level 3N engine/turbine cogeneration system designs are required to demonstrate through engineering calculations the achievement of certain minimum efficiencies on an annual basis (O.P. 5). Metered thermal data collected from on-line cogeneration projects can be used to calculate the overall system efficiency, incorporating both electricity produced and useful heat recovered.

Lastly, the study will include an analysis of the reduction in greenhouse gas reductions as a result of the program installations. This analysis shall be performed by utility service territory or other regional basis as determined reasonable to reflect the avoidance of greenhouse gas emissions from resources on the margin.

2. 2006-2007 RENEWABLE FUEL USE REPORTS

The PAs propose to continue submitting twice yearly renewable fuel use reports through the end of the PY 2007 (report to be delivered in 2008) according to the schedule established by the CPUC in Decision 02-09-051:

- “Program administrators for the self-generation program, or their consultants, shall conduct on-site inspections of projects that utilize renewable fuels to monitor compliance with the renewable fuel provisions once the projects are operational. They shall file fuel-use monitoring information every six months in the form of a report to the Commission, until further order by the Commission or Assigned Commissioner. The reports shall include a cost comparison between Level 3 and 3-R projects...” (O.P. 7)
- “Program administrators shall file the first on-site monitoring report on fuel-use within six months of the effective date of this decision [September 19, 2002], and every six months thereafter until further notice by the Commission or Assigned

Commissioner.” (O.P. 9) There has been no further notice regarding this requirement.

The Renewable Fuel Use Report #7, due in March 2006, will be prepared by the 2001-2005 independent evaluator. Reports 8 – 11 will be prepared by the new 2006-2007 evaluator.

3. PROGRAM ADMINISTRATOR COMPARATIVE ASSESSMENT

The PAs propose to update the Program Administrator Comparative Assessment. D.01-03-073 directed the PAs to “conduct an independent analysis of the relative effectiveness of the utility and non-utility administrative approaches we adopt today.” (O.P. 12) On September 2, 2003 the PAs delivered the first Program Administrator Comparison Report prepared by Itron, the SGIP independent evaluator at the time. Subsequently, in D.04-12-045, the CPUC authorized the PAs “to direct their consultant to update the September 2, 2003 comparative assessment report with data collected from June 2003 through May 2006, for submission by September 15, 2006. The report shall clearly identify all program administrators and address the performance of each.” (O.P. 9)

The PAs request that the September 15, 2006 due date be revised to January 19, 2007 to allow adequate time for the new evaluator to get up to speed with the program.

4. UPDATE OF THE COST-EFFECTIVENESS ANALYSIS

The PAs propose to deliver an update of the SGIP Cost-Effectiveness Evaluation Report, originally submitted on September 14, 2005. This update will reflect the cost-effectiveness methodology adopted by the CPUC and will include SGIP program data that was not available for inclusion in the interim report.

We also propose to go beyond the original report’s scope and include an in-depth sensitivity analysis of the variables that most drive the cost-effectiveness of each technology category. This study will include recommendations for changes to factors (e.g., program eligibility, system or installation requirements, incentive or funding levels) that will improve program cost-effectiveness.

Regarding the timing of the Update of the Cost-Effectiveness Analysis, D.04-12-045 states: “Ideally, we would adopt a cost benefit methodology prior to an analysis of SGIP cost-effectiveness. However, these two related efforts can be conducted concurrently, and updated as necessary. Itron intends to submit an interim SGIP cost-effectiveness report by February 15,

2005, and update the report in December 2006, if necessary, to reflect the methodology ultimately adopted by the Commission. We intend to proceed to adopt a final cost-benefit methodology following hearings.” (p. 16) Given the uncertainty of the timing of the CPUC’s adoption of an updated cost-effectiveness methodology for the SGIP, the PAs request that the due date be six months after the effective date of the CPUC decision adopting a cost-benefit methodology, but no sooner than March 16, 2007. This updated analysis will incorporate SGIP program data through 2006.

5. NEWLY PROPOSED STUDIES

The following three studies and resulting reports are proposed by the PAs for PY 2006 and 2007. These reports are closely related and have some overlapping subject matter. Once the independent evaluator is selected and the scope of work for these efforts are further defined, actual tasks may be combined together, broken into smaller efforts, or moved from one study to another. The PAs will notify the ALJ if it becomes necessary to revise the due dates.

(a) Retention Study

The PAs propose to deliver a retention study to assess the long-term persistence of impacts from self-generation technologies installed through the program or as a result of program activities. Installations dating back to the SGIP’s inception will be included. This study will include and differentiate between technologies still in place and operational, those that are in place but not in operation or not operating to capacity, and those that have failed or been removed. Technical degradation of impacts will also be assessed. A special area of focus will be to assess the retention and useful operation of leased systems. The study will attempt to develop an effective useful life (EUL) for each of the categories of SGIP technologies. This EUL will be an estimate of the median number of years that the technologies installed under the program are still in place and operational.

(b) Market Characterization Study

The PAs propose to deliver a market characterization report. The study will assess the market for self-generation technologies by analyzing the customers with successful SGIP installations and identifying the critical success factors. These factors may be operational, business, or facility characteristics that are associated with successful installations of self-generation technologies.

The study will:

- consider various factors that might define a successful installation, such as ease of equipment installation, capacity utilization, and equipment retention;
- identify the appropriate applications for each technology category as well as those application which are typically unsuccessful and result in underutilization or equipment removal; and
- identify the success factors that most contribute to program and project cost-effectiveness, and identify which factors undermine cost-effectiveness.

Lastly, the study will produce a comparison of SGIP penetration by technology type, by PA territory, and other meaningful geographical designations, such as county. The study will investigate the driving forces behind program and technology penetration, whether it be differences in processes or requirement of local building departments, local air quality regulations, local utility rates/tariffs, or other factors.

(c) Market Focused Process Evaluation

The PAs propose to deliver a program process evaluation that will focus on how the market interfaces with the program, and how these processes or requirements can be refined or modified to better meet the needs of the various market actors. This study will produce specific and actionable recommendations for the Commission to consider.

In addition to a general assessment of the program process from the various market actors' perspective, the study will specifically address the following questions:

- The application fee was instituted so that applicants could secure incentive funding while giving the PAs confidence that the applicants were committed to actually implementing the project. This application fee was considered to be simpler and faster than requiring a signed contract to secure incentive funds. Does the application fee serve its intended purpose? Are there other approaches that would be superior to accomplish same the objective?
- Does the SGIP application process work for public entities or other organizations with complex decision-making requirements?
- Are the incentive levels appropriate, relative to the equipment costs and the economic needs of various customer groups?

- Why has the program experienced a decrease in the number of cogeneration system installations? Is it due to more stringent emissions regulations or the increase in natural gas prices? Why are many of the systems that are installed failing to meet their waste heat requirements?

C. Next Steps

PG&E, on behalf of the PAs, is conducting a competitive bidding process to select an independent third-party evaluator for the 2006-2007 M&E efforts. PG&E and the PAs have completed a request for information process to develop a list of qualified vendors to bid on the work. A request for proposals will be issued upon ALJ approval of this motion. The remaining vendor selection and contracting process will take approximately four months to complete.

III. CONCLUSION

The SGIP PAs appreciate this opportunity to describe their proposal for 2006 and 2007 Measurement and Evaluation Reports for the Self-Generation Incentive Program (SGIP), and seek Commission approval of this proposal.

Respectfully submitted,

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By: _____/s/
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Dated: March 8, 2006

CERTIFICATE OF ELECTRONIC SERVICE

I, the undersigned, state that I am a citizen of the United States and am employed in the City and County of San Francisco; that I am over the age of eighteen (18) years and not a party to the within cause; and that my business address is Pacific Gas and Electric Company, Law Department B30A, 77 Beale Street, San Francisco, California 94105.

On the 8th day of March, 2006, I served a true copy of:

**JOINT MOTION OF THE SELF GENERATION INCENTIVE PROGRAM
ADMINISTRATORS TO APPROVE PLAN FOR 2006 AND 2007
MEASUREMENT AND EVALUATION REPORTS**

[XX] By Electronic Mail – serving the enclosed via e-mail transmission to all parties on the official service list for CPUC Docket R.04-03-017 that have provided e-mail addresses.

I certify and declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed on the 8th day of March, 2006 at San Francisco, California.

_____/s/_____
PATRICIA KOKASON

(END OF APPENDIX A)

CERTIFICATE OF SERVICE

I certify that I have by mail this day served a true copy of the original attached Administrative Law Judge's Ruling Approving Plan for 2006 and 2007 Measurement and Evaluation Reports on the Self Generation Incentive Program on all parties of record in this proceeding or their attorneys of record.

Dated May 18, 2006, at San Francisco, California.

/s/ Antonina V. Swansen
Antonina V. Swansen

N O T I C E

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